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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,165	09/26/2006	Shinichi Ajiki	12088/047001	7046

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EXAMINER	
IHEZIE, JOSHUA K	

ART UNIT	PAPER NUMBER
3633	

NOTIFICATION DATE	DELIVERY MODE
10/01/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/594,165	AJIKI, SHINICHI	
	Examiner	Art Unit	
	JOSHUA IHEZIE	3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/30/08, 9/26/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Japan on 3/10/05. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1-4, 6, 10-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Ajiki (US2002/0037195) in view of Swoboda (US Patent No. 4799819).

Ajiki teaches a fixing apparatus (fig. 1) comprising a pair of structural members (1, 2) each having an engagement groove (2B) formed in at least one side surface thereof, said engagement groove being provided at two side wall surfaces thereof with two protrusions protruding toward each other (v1), an end face of one of said pair of structural members, when said pair of structural members are fixed to each other, being abutted with one side surface of the other structural member such that one side surface of said one structural member is intersected with one side surface of the other structural member (fig. 1), characterized in that said fixing apparatus comprises an abutment member (4) abutted with one side surface of each of said pair of structural members; a

first engagement member (3) having two engagement parts (3h) capable of engaging the respective protrusions formed on the respective one side wall surfaces of said engagement grooves of said pair of structural members such that said two engagement parts are unable to escape outside from inside of said engagement grooves, said two engagement parts of said first engagement member being disposed at the respective side parts of said first engagement member on the side of said pair of structural members; a second engagement member (fig. 2B) arranged in the widthwise direction of said engagement grooves in such a manner as to be opposite to said first engagement member and having two engagement parts capable of engaging the respective protrusions formed on the other side wall surfaces of said engagement grooves of said pair of structural members such that said engagement parts are unable to escape outside from inside of said engagement grooves, said two engagement parts (3h) being disposed at the respective side parts of said second engagement member on the side of said pair of structural members; a female screw member (3c) disposed at said first and second engagement members in such a manner to be non-movable in a direction away from the respective one side surfaces of said pair of structural members; a male screw member (5) passed through said abutment member and threadingly engaged with said female screw member (fig. 1). When male screw member is tightened, the abutment member is brought into abutment with respective one side surfaces if the pair of structural members and the respective engagement parts of the first and second engagement members located in the engaging position are brought into abutment with the corresponding protrusions of the pair of structural members from

inside of the engagement grooves to outside, thereby fixing said pair of structural members to each other.

Ajiki does not teach of the engagement parts being moveable; however Swoboda teaches a connector with engagement parts (fig. 5) which moves between an engagement position and an insertion position (fig. 5, fig. 6). Swoboda also teaches a biasing means (fig. 23, 71) disposed between first engagement and second engagement members.

For claim 2 the connector of Swoboda teaches a holding member (71) for holding the first and second engagement members in an engaging or insertion position (fig. 30 and 31). For claim 3 the holding member is elastically deformable and the holding member is also used as the biasing means.

For claim 4 Ajiki teaches the one and the other ends of the female screw member (3C) in the width direction of the engagement grooves are integrally disposed at the respective side parts away from the pair of structural members of the pair of engagement members, however it does not teach of intermediate parts. However Swoboda teaches of elastically deformable intermediate parts (71) which when the inventions are combined would be disposed aside the female screw member to avoid interference between the female screw member and the intermediate parts and to ensure that the part between a side part where the female screw part is disposed and a side part where the engagement part is disposed are elastically deformable.

For claim 6, 10, 11-12 Ajiki teaches an abutment member but does not teach of a displacement prohibiting part. However the connector of Swoboda has a displacement

prohibiting part (fig. 24, part 62) which is brought between a pair of engagement members (63) thereby prohibiting the pair of engagement members from being displaced toward each other to the inserting position. It would have been obvious to one of ordinary skill in the art to put a prohibiting member between the engagement members to further strengthen the connection between the engagement members and the structural members in the engaging position.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ajiki and Swoboda to get a predictable result which is a fixing apparatus with moveable engagement parts. One would be motivated to make the engagement parts moveable so they can be inserted and removed with ease, making for ease of assembly and disassembly.

3. Claim 5, 7-9 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Ajiki and Swoboda as applied to claim 1 above, and further in view of Worrallo (US Patent No. 4168922).

Ajiki teaches of an abutment member, but does not teach of positioning parts. However Worrallo teaches a frame joining assembly (fig. 11) with an abutment member (fig. 6) that has tabs (58) which are fitted to the respective engagement grooves (16). It would have been obvious to one of ordinary skill in the art at the time of the invention to add tabs to the abutment member of Ajiki to get a predictable result which is an abutment member with positioning parts on it. One would be motivated to add positioning parts to the abutment member to help align the abutment member with the grooves of the structural members (col. 3 lines 64-68).

Conclusion

Claims 1-13 have been rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA IHEZIE whose telephone number is (571)270-5347. The examiner can normally be reached on 8am-5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571)272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSHUA IHEZIE/
Examiner, Art Unit 3633

/Brian E. Glessner/
Supervisory Patent Examiner, Art Unit 3633